

ABSTRACT

A pressure sensor device for producing a signal indicative of a pressure of a fluid to be monitored, including a housing having a fluid conduit for receiving the fluid to be monitored and a diaphragm positioned at an end of the fluid conduit. The diaphragm includes at least first and second portions, wherein a thickness of the first portion is less than a thickness of the second portion. A transducer is bonded to a surface of the first portion of the diaphragm and including piezoresistive elements for sending the signal. Preferred is a circular second portion and an annular first portion around the outer edge of the second portion. The housing is preferably tubular and includes an annular shoulder for mounting the diaphragm, along with an annular groove on the outer surface of the first portion and connecting the first portion to the annular shoulder.